



CRS

All-in-One Intelligent Power Backup System

Powered by 10kW 3-Phase
Hybrid Inverter + Integrated
Grade A LFP Battery + Smart
Mobile and Backed Platform





The CRS All-in-One Intelligent Power Backup System is a premium, globally competitive solution for resilient and intelligent energy storage. Combining the robust performance of a top quality 10kW 3-phase hybrid inverter, Grade A Lithium Iron Phosphate (LFP) batteries, and the Solarman Smart monitoring platform, this all-in-one system offers unmatched safety, efficiency, and real-time control for homes, businesses, and institutions.

CORE TECHNICAL SPECIFICATIONS & INNOVATIONS



BATTERY MODULE

- Chemistry:** Lithium Iron Phosphate (LFP) - Grade A Cells
- Capacity Range:** Scalable from 5kWh to 60kWh
- Cycle Life:** 8,000+ cycles at 80% DoD
- Smart BMS:** Integrated Active BMS with protection from overcharge, over-discharge, overcurrent, and temperature fluctuations
- Warranty:** 10-Year Battery Warranty (minimum 70% SoH)

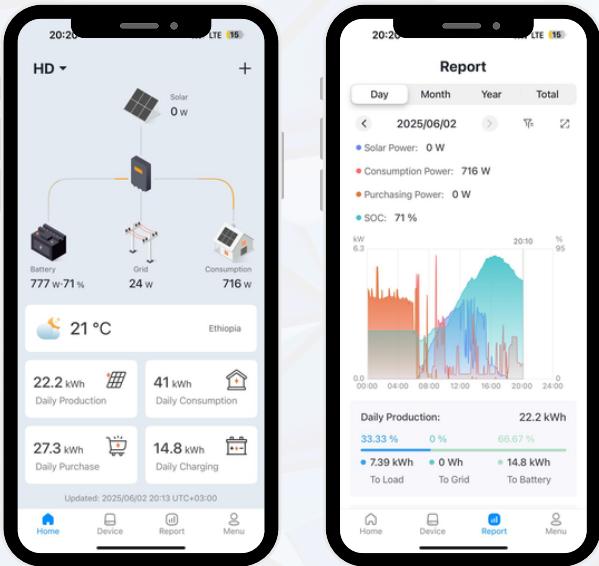


10KW 3-PHASE HYBRID INVERTER

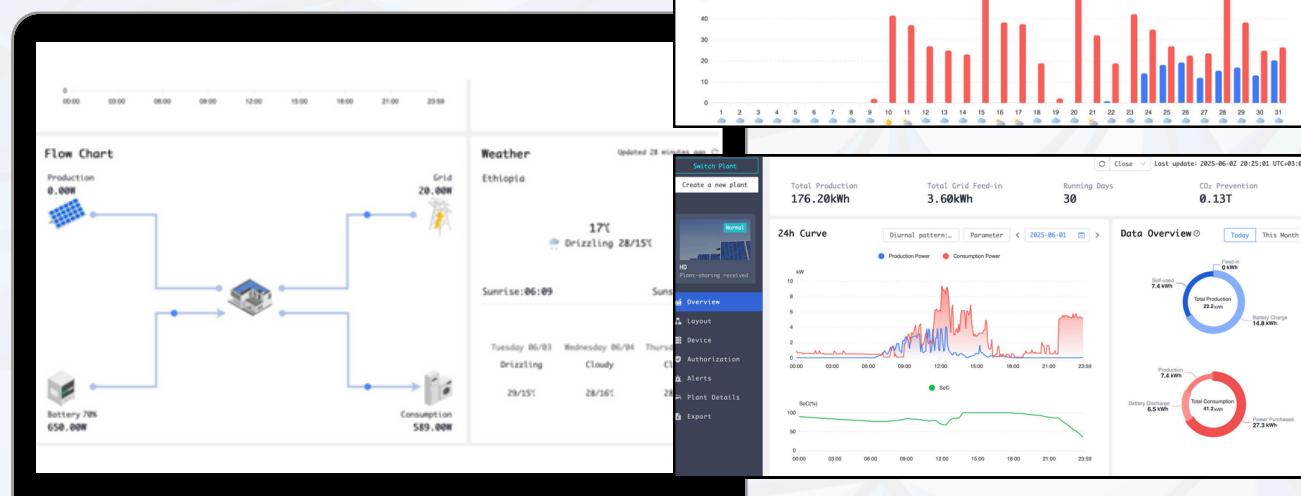
- Rated Output:** 10,000W, 3-phase, 400V
- PV Input Power:** 13kW Max
- PV Voltage Range:** 150V to 850V, MPPT tracking from 200-800V
- MPPT Inputs:** 2 independent MPPT channels (up to 26A each)
- AC Input Range:** 170V-280V, handles grid fluctuations without compromising appliance safety
- Switching Time:** ≤10ms between grid, generator, battery, and PV sources - seamless for sensitive equipment
- Generator Input Support:** Dedicated auto-start generator port
- Overload Capacity:** Supports up to 150% load for 10 seconds



CORE TECHNICAL SPECIFICATIONS & INNOVATIONS



- **Mobile App (iOS/Android):** Real-time visibility of PV generation, load consumption, battery status, and grid interaction



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- **Web-Based Backend Portal:** Cloud-based dashboard for deep analytics, alerts, and maintenance insights
- **Remote Diagnostics:** Historical trend analysis, firmware updates, and parameter tuning
- **User-Friendly Interface:** Clean visuals with customizable settings, performance KPIs, and device management
- **Installer Tools:** Dedicated access to configure and remotely support clients via QR scan

With the Solarman platform, users and technicians can monitor, control, and optimize system performance from anywhere in the world.

SMART DESIGN & SAFETY INTEGRATION

Design: Sleek, modern cabinet suitable for homes and commercial settings

Construction: High-quality powder-coated steel

Display: LED indicators + LCD touch screen

Integrated Cabinet – eliminates on-site cabling between battery and inverter

Plug & Play – pre-assembled, factory-tested, ready-to-install unit



Intelligent Cooling: Temperature-triggered active cooling ensures longevity and safe operation

No exposed wiring – fully enclosed system for aesthetic integration and absolute safety

Footprint: Space-optimized vertical unit with back-side cable entry

SYSTEM WARRANTY



5-Year Full Warranty (Inverter + Integrated System)

BATTERY WARRANTY



10-Year Performance Guarantee

SUPPORT



24/7 technical assistance, optional annual maintenance, and cloud-based remote troubleshooting

SMART DESIGN & SAFETY INTEGRATION

FEATURE	CRS SYSTEM	TRADITIONAL BACKUP SYSTEMS
Smart App Integration	✓	X
No wiring between inverter & battery	✓	X
Seamless source switching ≤10ms.	✓	X
Wide PV input (150–850V).	✓	Limited
Generator auto-start support.	✓	X
Mobile monitoring & alerts.	✓	Limited or Manual
Appliance-grade, closed cabinet.	✓	X
Grade A LFP cells only	✓	X (often mixed or reused)



OPTIONAL UPGRADES

- Outdoor cabinet version (IP65)
- Solar rooftop integration (DC/AC coupled)
- Auto Transfer Switch (ATS) inclusion
- EV charger integration
- Extended 24/7 cloud support contract

The CRS All-in-One Power Backup System is not just a backup power solution—it is a next-generation energy resilience platform, combining hardware excellence, smart digital control, and aesthetically integrated safety-first design.

It's intelligent, beautiful, and battle-tested for today's dynamic energy environments.

